

## Clinical Section

### Infection in the Nasal Sinuses in Children and its Relation to Chest Infection\*

By

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Efforts to correlate the existence of chest disease of the type with which we are dealing today, the so-called septic chest, with disease in the accessory nasal sinuses and to classify them as to origin or etiology has led to a considerable amount of controversial argument. Theories regarding the onset and the presence of chest infection of this nature and their relation to disease of the upper respiratory tract have been discussed very extensively without any very definite conclusions being formed.

In an analysis of a fairly large number of cases from our records and from observations I have been able to make in examining these children bronchoscopically and rhinoscopically, I am strongly of the opinion that in the vast majority of cases the onset of the disease is primarily in the chest and that the upper respiratory tract is only the port of entry of the organisms. The largest percentage of these children are infected and acquire the disease at a very early age, in the first year of life and in fact in some cases the infection begins at birth.

It seems to me that we must look for the cause of onset as in the case of asthma where an inherited predisposition exists and a certain percentage, large or small, must fall into this category. As a great majority of the cases occur in the poorer classes of people we must give our attention in this direction. Poor surroundings, improper care and nourishment have a definite bearing on its causation. In going into the history of these cases one almost invariably finds that the chest affection appears following whooping cough or measles or that the trouble started very shortly after birth from causes unknown to the parents, no doubt in this particular class of case secretions of mucus which cannot be expectorated give rise to a mild form of bronchitis or possibly pneumonia; this does not completely clear up and is constantly stirred up by fresh attacks of infection.

Attacks of bronchitis or broncho-pneumonia in early life that are repeated are other contributory causes. "The changes which take place in the bronchi are probably functional at first and later this leads to a permanent change due to the action of toxins and the stagnation of purulent secretions which destroy the normal function of the bronchial wall and allows fibrosis to fix the bronchi in a permanently dilated condition (bronchiectasis)." Jackson<sup>1</sup>.

The infection in the nasal accessory sinuses, it seems to me, must follow or is secondary to the chest condition because at such an early age, in many cases, the sinuses do not exist. This may be very early age but only in a very rudimentary state of development. In older children, that is to say, above the age of four years, it is true the history of onset of a chest infection associated with infection of the upper respiratory tract is often elicited and is significant. Here the infection above may be the cause or it may be the result of the chest infection. We must not forget, too, that cases of chest sepsis are met with in this age group who do not exhibit symptoms or signs referable to the nasal sinuses. Then again if we look back over all the cases of sinus disease in children who do not exhibit any signs of chest infection we have no alternative but to conclude that when the disease does exist in both regions it is purely coincidental.

Authorities universally agree on the subject of development of the accessory nasal sinuses and tell us that the antrum at birth is only a very narrow slit-like space in the maxilla. The ethoids are the first cells to appear and are evident in early fetal life. The frontals do not make their appearance until about the second year of life according to Skillern.<sup>2</sup> Some interesting studies have been made on the sinuses of infants and children after death to determine the incidence of infection in these cavities. Ebbs<sup>3</sup> examined 300 cases of children who had died in the children's hospital at Birmingham and found that in approximately 30% of the cases there was infection in the nasal sinuses. Skillern also has reported and quoted others with results which closely correspond to the above; but do these observations give us information of any worth while value, or what conclusions are we to draw from them. Surely it is only to be expected that children with fatal illnesses are bound to have some infection in the upper respiratory tract. There is a strong possibility that these cavities are infected during the terminal stages of a fatal disease. When resistance is lowered the function of defence such as that of ciliary action and phagocytosis must necessarily be very much impaired.

The investigation of the upper respiratory tract must not be overlooked in any case of chest infection and cough which does not always manifest itself as an outstanding symptom of sinus disease. Cough in children and in adults is a manifestation of laryngeal, tracheal or bronchial irritation and may be brought about through many causes which are mechanical in nature. I will not attempt to go into the details of these many causes but shall confine my remarks to cough as a manifestation or symptom of sinus disease. Cough is not a constant or persistent symptom of disease in the nasal accessory sinuses, by any means, as I have indicated above but manifests itself only, as a rule, after the patient has been in the recumbent posi-

\* Part of a symposium in respiratory infection in children, Post Graduate Course University of Manitoba, February, 1939.

tion for some time when secretions from the sinuses drop down and give rise to irritation in the larynx and trachea. During the day when the secretions are removed from the throat there may be little or no cough, so too, in hyperplastic conditions of the sinuses cough is not a prominent symptom.

#### DIAGNOSIS

The diagnosis is important and one must endeavour to correlate the physical findings with other tests and aids and never, for instance, depend on roentgen findings alone. This error is too often made. We must remember that positive findings which the x-ray often reveals may mean nothing. I will show some x-ray films of the sinuses later which demonstrate these facts very definitely. Often x-ray films are taken of the sinuses for diagnostic purposes and treatment is instituted on these findings alone, a practice which should be emphatically condemned. The differential diagnosis of maxillary from anterior ethmoidal infection must be given the most careful attention. This applies likewise in the case of the other sinuses. Shadows or veilings over certain areas of the sinuses may mean nothing so far as active disease is concerned. A thickened mucosal lining may give rise to this finding on either one or both sides of the skull depending upon the effect and distribution of a previous infection which has subsequently become completely well. It is well known too that x-rays of the nasal accessory sinuses during an attack of hay fever will show an opacity over the sinuses that may be completely clear a day or so after the attack has subsided. Proetz has recently called attention to this fact. While roentgen ray is a very valuable aid in the diagnosis of sinus disease it must not be taken to the exclusion of the clinical findings.

Careful inspection of the mucosal lining of the nose is essential and the characteristic appearance of the membranes which is always present in hay fever and allergic conditions must never be overlooked. In many cases, no doubt, we can and do meet with infections which are superimposed on an allergic condition. In differentiating allergic from infectious cases one may be helped by the examination microscopically of nasal smears for the presence of eosinophils. I said may be helped, because I think the alleged significance of eosinophils in the tissues and secretions has been overemphasized. Secretions and tissue removed from allergies will at times show many eosinophils and at other times show none at all. When an infection is superimposed on a condition of allergy it of course must be dealt with in the usual way.

It would require much more time than is at our disposal today to cover in detail the many problems involved in diagnosis of disease in these important cavities. I need hardly say that I have already touched on a very few of the points which I have considered important.

#### TREATMENT

And now we shall go to the subject of treatment. Many fads and fancies have been advocated in the

years that have passed since the importance of these cavities have come to be recognized. I should like to have this opportunity to warn you against the indiscriminate use of nasal packs with drugs of all descriptions, such as silver, epiniphern, zinc, etc., and their use without regard to the condition which is underlying. This practice I emphatically deprecate. Many of the children who have been subjected to these measures would have gotten better anyway, others get better in spite of it. So let us not be too anxious about instituting treatment in many of these acute cases unless we are sure of the exact nature of the condition with which we have to deal. General hygienic conditions in many instances may be far more necessary and important than dropping this or that and other drug into the child's nose. If solutions must be used in the nose we must be careful to use physiological and isotonic ones. By the improper and indiscriminate use of drugs in the nose of both children and adults there is danger of bringing about a condition worse than that which we started out to treat. Remember that the function of the nasal mucus membrane which in regions is covered with epithelium which is highly specialized can be seriously interfered with and damaged by the improper use of drugs.

Investigations have been made recording the results of the application of some of the drugs which I mentioned a few moments ago to the mucus membranes of the nose over periods of time varying from a week to a month and it is interesting to know the changes which take place in the membranes. Hollender<sup>5</sup> did some investigations recently on animals and his results and conclusions are on animals and his results and conclusions are worth noting. He thinks that his results may be evaluated clinically. The injury that comes about usually he ascribes to the use of unphysiological solutions. Mosher has described the histopathology in the human nose after similar experiments and says that fibrosis with thinning of the tunica propria, hyperplasia of the epithelium with some metaplasia take place in the mucus membrane of the nose. There is, according to this authority, a partial destruction of the glandular function and a decided increase in the goblet cells. Dean<sup>6</sup> claimed that there was always a thickening of the blood vessel wall especially of the capillaries. Some of the acini of the glands appeared to be obstructed by the cellular hyperplasia. Hollender, whose views are at variance with the above mentioned authors, thinks, however, that the clinical progress following treatment with these drugs should be closely watched and evaluated, as his experimenting was carried out almost entirely with animals.

Another form of treatment which I should like to caution you about is the so called displacement treatment of Proetz.<sup>7</sup> When Dr. Proetz instituted this valuable method of treatment ten years ago and presented it to the profession it was not his intention or thought that it was to be used indiscriminately in all forms of sinus disease; an excel-



lent procedure in certain cases where the diagnosis has previously been established as suitable for its application but how many times have we had people present themselves in the past few years who have been subjected to this form of punishment for months on end when the treatment was obviously surgical.

"Having cleansed my bosom of this perilous stuff which weighs heavy upon the heart" I will conclude with a word of warning against cutting operations in the nose in children either for diagnostic purposes or for treatment. In the case of the former it should never be permissible, in the latter, only after the most careful consideration has been given for its application. Surgical procedures in the nose of children under the age of ten years is seldom necessary.

Attention and regulation of diets constitute an important part of the treatment of children affected with disease in any part of the respiratory tract. These details should be looked to in co-operation with the pediatrician. It has been shown that some individuals with chronic infection have less vitamin C in the blood and urine than normal individuals who take the same amount of vitamin C in their diet. Also some data is presented to show that more vitamin C is needed by people with chronic infection than by normals to bring about an increase of the vitamin C content of the blood.

In older children and in adults when surgery is contemplated the surgeon should have the most complete picture of the state and extent of the sinuses involved. This is possible only by a thorough and complete examination with all the aids which are at our disposal and the correlation of our findings.

#### CONCLUSIONS

There is an old erroneous saying "once a sinus always

a sinus." I know of no more vicious advice to give a person afflicted with sinus disease. Another favorite is "don't let anyone operate on your sinuses, they will make you worse." This brands the individual, especially the impressionable, in many cases with sinus disease for life.

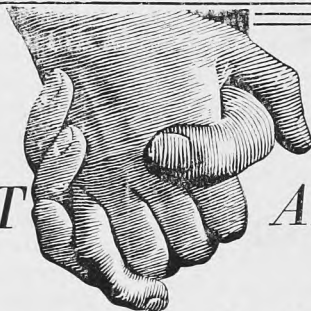
A thorough knowledge of the anatomy of all the accessory nasal sinuses, as well as the regions in the upper respiratory tract that are tributary to them, is essential before one is justified in attempting to handle the treatment of these difficult cases either surgically or otherwise. Where surgical procedures are indicated they must be carried out, conservatively or radically as the individual case demands.

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## CASE REPORT

### Carcinoma of the Tongue

*From the Tumour Clinic  
Winnipeg General Hospital*

Mrs. R. age 53, presented herself in January, 1932, with a large fungating tumor of the tongue. She had had pain in her tongue since July, 1931, and the tumor since October, 1931. On examination there was a large tumor on the left edge of the tongue occupying its middle third. The tumor was raised above the level of the tongue about 1 cm. and its diameter was 3.5 cms. The tongue was moveable. The remainder of the mouth was normal. There were some enlarged glands on the left side of the neck but they did not feel indurated. A biopsy of the tongue showed epidermoid carcinoma grade 2. At operation the growth on the tongue was thoroughly coagulated by diathermy. To avoid secondary haemorrhage from the lingual artery, the submandibular triangle was cleared of its contents, and through the fibres of the hyoglossus the second part of the lingual artery was ligated. Her convalescence was uneventful and three weeks later fifteen mcs. of radon were inserted into the tongue at the site of the tumor.

She failed to return to the Follow Up Clinic until six months later. On examination at this time, her tongue and the operative field in the neck were normal, but there was a large nodule 1 inch in diameter in the upper carotid region. This nodule was stony hard and was fixed in the deeper structures. It failed to regress with a course of X-radiation and a rather large dose of radon was inserted into the nodule. Following a very stormy period of reaction and infection she gradually improved.

Examination now, seven and a half years after the onset, shows a well healed scar in a very mobile tongue; very marked fibrosis in the upper part of the neck, in a patient whose general health is excellent.

**Dr. Raymond C. Parker, Native-born Nova Scotian  
Heads New Squibb Laboratory**

It is announced that a Canadian, Dr. Raymond C. Parker, a native of Newport, Nova Scotia, has been appointed to head the new Squibb laboratory for the study of filterable virus diseases which has been established at New Brunswick, New Jersey. Dr. Parker was educated at Acadia University and at Yale. He also studied for two years in Germany as National Research Council Fellow in Biology. Returning to America, he became assistant in the division of experimental surgery at the Rockefeller Institute in 1930, and five years later associate in collaboration with Dr. Alexis Carrel. His researches have dealt with selection in protozoa and the biology of tissue cells in pure cultures. He is the author of the leading text on "Methods of Tissue Culture."

—Advt.

## Special Articles and Association Notes

### The Manitoba Medical Association Review

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### The Annual Meeting

The Annual Meeting of the Manitoba Medical Association was held this year just after the outbreak of war. With several of the visiting speakers and many of the local members either called for military duty or expecting to be called up, it was inevitable that there should be some confusion in detail and modification of the pre-arranged programme. The Executive Committee finally decided that it would be simpler to proceed with the meeting on the dates scheduled rather than to postpone the meeting. The attendance was naturally lower than last year, but it must be agreed that much useful work was done.

Several of the visiting clinicians came to the meeting at great personal inconvenience and their lectures were very much appreciated, and the thanks of the members are due to these men in a measure which goes far beyond the wording of a formal resolution of thanks.

At the Annual General Meeting the Association passed a resolution in favor of federation with the Canadian Medical Association with certain reservations. Resolution number twelve with regard to war conditions was also of great importance.

It is impossible to foresee the conditions under which another Annual Meeting of the Association may be held, but it is probable that many familiar faces will be absent.

### Meeting of Executive

Summary of the Minutes of a Meeting of the Executive Committee of the Manitoba Medical Association held at the Royal Alexandra Hotel, Winnipeg, Sunday, September 10, 1939, at 8.30 p.m.

The meeting was preceded by a dinner at which the members of the Executive Committee and the Chairmen of the various Standing Committees were guests of the President, Dr. W. S. Peters.

#### Hospital Aid Act and Public Ward Patients.

The question of changing the form of admission for public ward patients was considered, and after discussion a motion was passed referring the question for consideration to the incoming executive.

#### Relief Cases in Unorganized Territory.

Payment for medical services for relief cases in unorganized territory was discussed at length, and it was finally decided that it was not necessary at present to ask for any change in the basis for payment.

#### Record of Presidency.

A motion was passed instructing the committee to draw up a suitable certificate to be given to each President of the Association, and also a scroll with the signature of each officer of the Association.

#### Medical Appeal Board of the Workmen's Compensation Board.

The formation of the Medical Appeal Board of the Workmen's Compensation Board was discussed at length, and it was finally decided to maintain the arrangements originally established in 1934. A motion was passed naming Dr. W. W. Musgrove as the suggested Vice-President of the Medical Appeal Board of the Workmen's Compensation Board.

#### Resolution from North West District Society Re. Health Officers.

A resolution from the North West District Society with regard to health officers was referred back to this society for further consideration.

#### Resolution from Brandon District Medical Association Re. Salaries to State Medical Officials.

A resolution from the Brandon District Medical Association with regard to salaries to state medical officials was referred to the Committee on Sociology for study and report.

#### Committee Reports.

The reports of the various Standing Committees were read and approved.

#### Nominating Committee.

The Chairman appointed three Past Presidents, Dr. Geo. Clingan, Dr. H. O. McDiarmid and Dr. C. W. Burns, as a Nominating Committee, and the



report presented by the Committee was adopted by the Executive Committee.

#### **Vacancy on Executive Arising Out of War Conditions.**

A motion was passed instructing the Committee on Resolutions to bring in to the Annual Meeting a resolution giving the Executive Committee power to suspend the constitution with regard to election of officers and members of the executive as an emergency measure in order to fill any vacancies that might arise as the result of war conditions.

#### **Members on Committees of Canadian Medical Association.**

The list of representatives from Manitoba on the various Committees of the Canadian Medical Association was approved.

The meeting then adjourned.

### **Annual General Meeting**

Summary of the Minutes of the Annual Meeting of the Manitoba Medical Association held in the Royal Alexandra Hotel, Tuesday, September 12th, 1939, at 2 p.m.

Following dinner, the President, Dr. W. S. Peters, called the meeting to order, and first asked for the report of the Nominating Committee.

As there were no nominations submitted from the floor, a motion was passed closing the list of nominations. The President then appointed two scrutineers.

#### **Special Communication.**

The President asked the Secretary to read the telegram from the President of the Canadian Medical Association, Dr. F. S. Patch, advising that on account of war conditions he was unable to attend the meeting and offering best wishes to the Association.

#### **Presidential Address.**

The Vice-President, Dr. W. E. Campbell, took the chair, and the President, Dr. W. S. Peters, delivered his Presidential address. Dr. Peters dealt with the subject "Thirty Years in Medical Practice." The address was very much appreciated.

#### **Minutes of Last Annual Meeting.**

It was moved by Dr. E. J. Skafel, seconded by Dr. C. B. Stewart: THAT the minutes of the last Annual Meeting be taken as read. —Carried.

#### **North of 53 District Medical Society.**

The President announced acceptance by the Executive Committee of the application of the North of 53 District Medical Society for affiliation with the Manitoba Medical Association.

#### **Committee Reports.**

The reports of the various Standing and Special Committees were read and their adoption being duly moved and seconded were accepted.

The respective Committee reports are inserted and form part of these minutes.

#### **Report of Resolutions Committee.**

Dr. Clingan presented the report of the Resolutions Committee:

1. BE IT RESOLVED THAT this Association in annual meeting assembled express its appreciation and thanks to the Ladies' Committee for the very interesting programme prepared for the wives of the members attending the Annual Meeting.
2. BE IT RESOLVED THAT this Association in annual meeting assembled express its thanks to the management and staff of the Royal Alexandra Hotel for their valuable services during the Annual Meeting.
3. BE IT RESOLVED THAT this Association in annual meeting assembled express its thanks to the Press of the City of Winnipeg, who have been most liberal in assisting the Association during the Annual Meeting.
4. BE IT RESOLVED THAT this Association in annual meeting assembled express its thanks to the Pine Ridge Golf Club which has been most liberal in their assistance to the Entertainment Committee during the Annual Meeting.
5. BE IT RESOLVED THAT this Association in annual meeting assembled express its thanks to the Medical College which has been most liberal in their assistance to the Association during the Annual Meeting.
6. BE IT RESOLVED THAT this Association in annual meeting assembled express its thanks to the Manitoba Club which has been most liberal in their assistance to the Association during the Annual Meeting.
7. BE IT RESOLVED THAT this Association in annual meeting assembled establish life memberships in the Manitoba Medical Association for registered practitioners who have retired from practice and have been members in good standing of the Manitoba Medical Association for ten years.
8. BE IT RESOLVED THAT this Association in annual meeting assembled express its appreciation and thanks to the Canadian Medical Association for sending a team of visiting speakers to the Annual Meeting, and for their generous assistance in the preparation of the programme.
9. BE IT RESOLVED THAT this Association in annual meeting assembled express its appreciation and thanks to the visiting speakers who have contributed so largely to the success of our meeting.
10. WHEREAS, the Manitoba Medical Association has always been desirous of co-operating to the fullest possible extent with the Canadian Medical Association, and,

WHEREAS, the Committee on Constitution and By-Laws has recommended that the Manitoba Medical Association change its relation to the Canadian Medical Association to that of a Division with certain reservations, and,

WHEREAS this recommendation has been endorsed by the Executive Committee of the Manitoba Medical Association,

THEREFORE BE IT RESOLVED, that the Manitoba Medical Association in annual meeting assembled should change its status to that of a Division of the Canadian Medical Association, provided:

- (1) THAT the Manitoba Medical Association shall retain such features of its constitution as it considers important, and,
  - (2) THAT the Manitoba Medical Association may revert to the status of a branch if it so wishes after one year's notice of such intention.
11. WHEREAS, the Manitoba Medical Association has indicated its intention to change its relation to the Canadian Medical Association to that of a Division,
- THEREFORE BE IT RESOLVED, that the Manitoba Medical Association in Annual Meeting assembled do make the following amendments to the constitution:

*Article I.—Name*

ADD—In case of Federation with the Canadian Medical Association the Society may be known as the Canadian Medical Association—Manitoba Division.

*Article VI.—Section E*

TO BE ADDED—Standing Committees to conform with the Constitution for the division of the Canadian Medical Association shall be appointed by the Executive at the Annual Meeting.

*Article IX.—Executive Committee Duties*

ADD—It shall name and instruct representatives of the Manitoba Medical Association on the Council, the Executive, the Nominating Committee and Standing Committees of the Canadian Medical Association, and shall receive due reports from such representatives.

In matters of importance concerning relations between the profession and the public or between organized medical bodies, the Executive Committee may ask the Advisory Council for a considered opinion upon such question.

*Article VI.—Section E*

The Advisory Council of the Manitoba Medical Association shall be formed as follows—the President of the Manitoba Medical Association, the President of the College of Physicians and Surgeons of Manitoba, the Deputy Minister of Public Health, the Dean of the Medical Faculty

of the University, all ex officio, and such other members as the Executive of the Manitoba Medical Association may consider necessary.

*Section F*

The duty of the Advisory Council shall be to furnish the Executive when required, with the unified view of the Medical Profession of the Province.

12. WHEREAS, Canada is in a state of war; and
- WHEREAS, such state may continue a long time; and,
- WHEREAS, it is desirable that those responsible for the conduct of national affairs should have the fullest support of the citizens of Canada; and,
- WHEREAS, it is essential that provision should be made for the correlation of the medical services for the civilian population and the Medical Faculties, as well as the fighting services; and,
- WHEREAS, the Canadian Medical Association, its Divisions and Branches, is well qualified to represent the expert and considered opinion of the majority of medical practitioners in Canada;
- THEREFORE, be it resolved that this, the Manitoba Medical Association in Annual Meeting assembled, pledges full support to our country in whatever manner its services and those of its members can be best utilized, and to that end will co-operate with the Canadian Medical Association in any plan which may be evolved; and,
- BE IT FURTHER RESOLVED, that we would urge in order to obtain the utmost in service from the medical profession, that the Dominion Government accept the services of an Advisory Board appointed by the Canadian Medical Association.
13. WHEREAS, officers and members of the Executive Committee of the Association may be called away for war duty,
- THEREFORE BE IT RESOLVED that this Association in annual meeting assembled do confer upon the Executive Committee, as an emergency measure, the power to suspend the constitution insofar as it relates to the election of officers and members of the Executive, and be given the power to fill vacancies among the officers and the members of the Executive Committee.

All these resolutions 1-13 were passed.

In connection with number resolution twelve with regard to war conditions, Dr. Routley read a telegram which the Canadian Medical Association had sent to the Prime Minister, the Minister of Pensions and Minister of National Defence. He also read letter which had been sent from the Quebec Division of the Canadian Medical Association to its members, and also questionnaire in the form of a card which had been sent to all the members in Quebec.

It was moved by Dr. Geo. Clingan, seconded by Dr. C. B. Stewart: THAT a copy of resolution number twelve be sent to the Prime Minister, the Canadian Medical Association and the Press.

—Carried.

It was moved by Dr. Geo. Clingan, seconded by Dr. C. B. Stewart: THAT the Executive Committee of the Manitoba Medical Association be given power to carry out any course of action that may be decided upon in connection with resolution number twelve.

—Carried.

### Report of Scrutineers.

The report of the scrutineers was then presented by Dr. Rawson and was adopted.

President.....	Dr. W. E. Campbell, Winnipeg
First Vice-President.....	Dr. A. E. Hudson, Hamiota
Second Vice-President.....	Dr. H. D. Kitchen, Winnipeg
Secretary.....	Dr. C. W. MacCharles, Winnipeg
Treasurer.....	Dr. C. E. Corrigan, Winnipeg
Winnipeg Member at Large.....	Dr. A. M. Goodwin, Wpg.
Rural Member at Large.....	Dr. F. K. Purdie, Griswold

There being no new business, the meeting then adjourned.

## Reports of Committees for Annual Meeting

### Report of the Committee on Constitution and By-Laws

#### *Re. the Federation Proposal*

In accord with the instructions of the executive, the resolutions provisionally recommending action by the Manitoba Medical Association with respect to the above proposal, was presented to Council at the Annual Meeting of the Canadian Medical Association in Montreal. In the presentation certain points were stressed, viz., that the Manitoba Medical Association had been from the inception of the movement, sympathetic with the aim, but that the Committee of Federation had considered that the form of organization proposed in the various amendments to the constitution of the Canadian Medical Association, failed to meet the requirements for a strong central organization, in particular such fundamental problems as the basis of representation, whether by individual membership or by organized provincial units, and also the respective fields of action to be occupied by the Canadian Medical Association and the Provincial Associations remain unanswered.

In view of the action of the other Provinces, under these circumstances, the Committee of Federation are compelled to assume that all provincial liability with respect to Federation, is conditioned by that Clause of the Constitution which states that each province shall retain complete control of its own affairs.

The Federation Proposal is thus reduced to nothing more than an undertaking to co-operate with the Canadian Medical Association which is something that it has always done in the past and may safely continue to do in the future.

It is to be added further, that the statement of the position of the Manitoba Medical Association received a sympathetic and attentive hearing from Council. The provisional resolution to join the Federation was welcomed and no objection was raised to the provisos attached to it. It was also pointed out that the Dominion Committee on Constitution and By-Laws would continue its efforts to meet the points that were raised.

F. D. McKENTY,

*Chairman, Committee on Constitution and By-Laws.*

### Committee on Historical Medicine and Necrology

#### *The President and Members of the Manitoba Medical Association.*

Your Committee on Historical Medicine and Necrology begs to report as follows:

Within the year the following Manitoba physicians have passed away: Dr. G. A. Brown, Winnipeg; Dr. W. Mott, Rathwell; Dr. S. A. McKeague, Winnipeg; Dr. Wm. Chestnut, former Associate Professor of Medicine in the Faculty of Medicine; Dr. W. H. Rennie, President of the College of Physicians and Surgeons of Manitoba and former member of the Manitoba Medical Association Executive; Dr. H. H. Elliott, former Commissioner of Manitoba; Dr. R. J. Crawford, Winnipeg; Dr. L. S. Gendreau, St. Norbert; Dr. P. B. Grant, Winnipeg; Major J. A. Devine, formerly Professor of Materia Medica and Therapeutics in Manitoba Medical College; Dr. H. P. Galloway, former President of Manitoba Medical Association; Dr. Olafur Stephensen, first Icelandic doctor in Canada.

The Medical History Club held several interesting meetings during the past season.

A paper on Dr. Cheadle in Western Canada, 1862-63, was read before the section of Historical Medicine at the Annual Meeting of the Canadian Medical Association at Montreal in June.

All of which is respectfully submitted.

ROSS MITCHELL,

*Chairman,*

*Committee on Historical Medicine and Necrology.*

The remaining committee reports will be published in the November Review.

### NOTICE

Applications are invited for the post of assistant surgeon on the honorary attending staff of St. Boniface Hospital. There are at present two vacancies. Other things being equal, preference will be given to candidates who possess a Fellowship in a Royal College of Surgeons. Applications should be forwarded to Sister Superior, St. Boniface Hospital, on or before Oct. 7th, 1939.



## Department of Health and Public Welfare

### NEWS ITEMS

**THE PREVENTION OF SKIN DISEASES IN CHILDREN:** The following is the second article on this subject prepared by Dr. George Clinton Andrews, Associate Professor of Dermatology, College of Physicians and Surgeons, Columbia University, New York. The first article was published under this column in the September 1939 edition:—

"Acne and seborrhoeic dermatitis are connected with the general health and basically are probably influenced in a large measure by the activity of the pituitary gland, which is particularly pronounced during puberty. Seborrhoea of the scalp undoubtedly contributes to the development of acne lesions on the face, and it is believed by many that the micro-organism associated with seborrhoea is identical with the acne bacillus. For these reasons one of the first steps in the prevention of acne is the institution of proper scalp hygiene. Diet also seems to influence the incidence and course of both acne and seborrhoeic dermatitis. Low-fat and low-carbohydrate diets are advisable in both of these conditions. Of course, constipation is an important factor and should be avoided.

"In acne the prevention of disfiguring pits and keloids is important and requires early treatment, especially of the indurated type characterized by numerous comedones, deep seated pustules and an oily, sallow skin. X-ray therapy is the most reliable method of halting the progress of severe acne. It is inadvisable to use x-ray, however, in patients under sixteen years of age since the endocrine overactivity preceding this age will continue to contribute to the hyperactivity of the sebaceous glands with accompanying comedone and pustule formation. In these earlier years one should depend more on local treatment with astringent lotions such as *lotio alba*, careful removal of comedones, drainage of pustules and frequent exposures to the ultraviolet rays. The latter may be given in gradually increasing dosage, preferably to the point of producing repeated, mild exfoliation of the skin.

"Treatment of all forms of dandruff is also the first step in prevention of a spread of seborrhoeic dermatitis to the face, chest and back. Daily application of a tonic, such as the following, serves to lessen the dandruff and keep the scalp clean, and in addition an oil should be used the night before shampoo, or even oftener if the scalp is excessively dry:

R	Liquor carbonis detergens	5	ii
	Hydrarg chloridi corrosive	gr	iv
	Propyl alcohol	qsad	viii
R	Acid salicylic	5	i
	Ol ricini	5	i
	Ol olivae	3	iv

"To prevent dermatophytosis and ringworm of the scalp one must be cognizant of the multiple sources from which the child may acquire fungi. Tinea of the scalp is usually contracted from another infected child or from household pets, especially cats and dogs. Careful isolation of cases should be enforced. Obviously the child with tinea capitis should not attend school, and at home careful supervision should be enjoined. Other children in the family must be warned against wearing the patient's hats or using combs, brushes and other articles likely to transmit the fungus. Hats made of ordinary paper bags serve well since they can be renewed frequently and the contaminated ones burned. At the first sign of tinea capitis in a home an effort should be made to ferret out the source of the infection. Animal pets must be examined carefully for patchy alopecia or eczematoid eruptions and removed from the home before other children of family are infected.

"Dermatophytosis of the feet is commonly neglected until a severe vesiculo-pustular eruption brings the patient to the physician. Prolonged involvement of the toe webs and soles may result in allergic reactions to the fungus products manifested by dermatophytides or vesiculo-pustular and squamous eruptions on the fingers and elsewhere on the body surface. Diligent treatment at the first sign of infection on the toe webs or soles will prevent these allergic reactions as well as much suffering and spread of the infection to others. A neglected infection on the toe webs will eventually lead to most recalcitrant infection of the fingernails through scratching. Early lesions are usually mild and respond well to daily applications of Whitfield's ointment. The toes must be thoroughly dried after the bath and during the day a dusting powder freely applied will retard growth of the fungus. Children with dermatophytosis should be excluded from gymnasiums and swimming pools. The use of paper or individual slippers in gymnasiums and swimming pools is worthwhile. All towels, bathing suits, etc., should be thoroughly boiled and steamed for fully thirty minutes at 100 C. Stockings should be soaked in 1:1000 solution of bichloride of mercury for twelve hours and carefully rinsed before drying.

"Oftentimes pityriasis versicolor lesions if untreated will upon exposure to the sun give rise to white spots which will stand out in marked contrast to the tanned, normal skin. This failure of the skin to pigment in the lesions is attributed to filtration of ultraviolet rays by the fungus. Such a persistent, unsightly, mottled appearance may be prevented by early diagnosis and treatment of the brown scaly macules of varying size usually distributed over the trunk. The disease is easily cured with a saturated solution of sodium thiosulphate applied night and morning for ten to fourteen days.

"Yeast organisms are prone to flourish on moist, apposed surfaces. Neglect of cleanliness in these areas accounts for ringworm infections of the groin and some cases of intertrigo of the intergluteal, inguinal and axillary regions. The perineal region must be thoroughly dried after bathing and covered with talcum powder. Intertrigo in infants requires further preventive measures. After washing with soap and water the diapers must be soaked in a 1:1000 solution of bichloride of mercury for several hours. They are then dried and used without ironing.

"Scabies may be mentioned only to emphasize its contagious nature and the importance of isolating cases from other children in the household. Though it is often difficult to prevent contagion in the home one should insist on other members sleeping apart from the infected child, and avoiding contact where possible.

"Internal causes of which the chief ones are metabolic disturbances are important in the development of disorders of the skin. However, the kind of lesion and its severity do not indicate the extent of the metabolic disturbance connected with it. In seborrhoeic dermatitis, acne vulgaris, and some cases of eczema there is a tendency to intestinal fermentation or putrefaction. Inability to digest carbohydrates or certain foods, or excessive intake of these, hyperacidity of the urine, constipation, low metabolic rate, and many other internal disorders should be corrected in order to prevent the development of furunculosis, folliculitis, pruritus, acne and eczema. Endocrine disorders likewise influence the incidence of dermatoses, and in children subject to xerosis and keratosis pilaris the cure and the prevention of recurrences is accomplished by the correction of disturbances of the function of the thyroid and other glands that may be present. Hypersensitivity or allergy to certain foodstuffs may be responsible for the development of infantile eczema.

Recognition of this may lead to a cure of the disease and to the prevention of its recurrences. The offending foodstuffs in children are usually those which are encountered early in infancy. These are milk, wheat, eggs, orange juice and fish (cod liver oil). Whereas intradermal tests with these substances may shed some light upon specific foods causing the eczema, results of such tests are often inconclusive or disappointing, and elimination by the 'trial and error' method is of greater practical value. Besides these substances, other foods and also contact substances and inhalants may be the causes of allergic eczema. Sensitivity to silk and orris root are not uncommon. In these cases there is an intense pruritus which is generally localized at the bends of the elbows, the popliteal spaces, and the sides of the neck. The skin changes consist of erythema, vasculature and a leathery thickening and excoriations caused by rubbing and scratching. The skin is the shock tissue in which a hypersensitivity exists to articles of silk inhaled by the patient. This type of eczema, due to inhalants, resembles that due to foods and both can be prevented by an early recognition of the allergic problem involved and the institution of appropriate measures.

"The prevention of congenital syphilis can be so efficiently accomplished by ante-natal treatment that it deserves special emphasis. Every pregnant woman should have a Wasserman and Kahn test and a careful physical examination. If there is any suspicion of syphilis the serology tests should be repeated and if doubt still exists the spinal fluid should be examined or a provocative Wasserman test should be made. If the diagnosis of syphilis in the mother is established before the birth of the child energetic anti-syphilitic treatment should be given. This should consist of alternating courses of arsphenamine and bismuth with particular emphasis being placed upon the treatment during the 5th month of pregnancy. Treatment should be continuous and in doses appropriate to body weight, a pregnant woman receiving as much as one who is not pregnant but of the same body weight. The consensus of opinion is that infection of the foetus probably does not occur until about the 5th month of pregnancy, and then probably because of a regeneralization of the infective agent in the maternal blood stream. Treatment of the syphilitic pregnant mother may, therefore, be directed either towards the prevention of infection of the foetus prior to the 5th month of pregnancy or, if treatment is started after the 5th month, towards the actual early treatment of an already existing syphilitic infection in the foetus. Without anti-syphilitic treatment there is strong likelihood that a syphilitic infant will be born but with proper anti-syphilitic treatment begun early and carried throughout the pregnancy the outlook is completely reversed and there is great probability that a normal living child will be born. According to Moore the results of ante-natal syphilitic treatment are as follows:

Treatment of Syphilitic Mother	Number of Cases	Percentage of Syphilitic Children
None	201	96.5
Mercury before, none during pregnancy	87	89.6
Arsphenamine before, none during pregnancy	15	80.0
Mercury during pregnancy	111	72.0
Arsphenamine before, mercury during pregnancy	26	26.9
Arsphenamine during pregnancy	98	19.3
Arsphenamine before and during pregnancy	7	14.2"

#### COMMUNICABLE DISEASES REPORTED

Urban and Rural - August 13th to September 9th, 1939.

**Tuberculosis:** Total 54—Winnipeg 13, Unorganized 8, Kildonan East 3, Rosedale 2, Shell River 2, Bifrost 1,

Brandon 1, Brooklands 1, Cartier 1, Clanwilliam 1, Cypress North 1, Dauphin Rural 1, De Salaberry 1, Hanover 1, Kildonan West 1, Lac du Bonnet 1, Lansdowne 1, Lawrence 1, Montcalm 1, Morton 1, Neepawa Town 1, Odanah 1, Portage Rural 1, Rockwood 1, Rossburn 1, Russell 1, St. James 1, St. Vital 1, Silver Creek 1, Transcona 1, Whitehead 1.

**Whooping Cough:** Total 50—Winnipeg 26, Kildonan East 5, St. Boniface 5, St. Vital 5, Flin Flon 2, Minnedosa 1, Unorganized 1 (Late Reported: Roblin Rural 3, Brandon 1, St. Vital 1).

**Measles:** Total 44—Winnipeg 16, Unorganized 14, Brenda 2, Minitonas 2, Norfolk North 2, Riverside 2, Brandon 1, Lawrence 1, Swan River Rural 1 (Late Reported: Brenda 3).

**Scarlet Fever:** Total 35—Winnipeg 20, St. Clements 4, Killarney 2, St. Boniface 2, St. Vital 2, Morris Town 1, Pembina 1 (Late Reported: Roblin Rural 2, Turtle Mountain 1).

**Chickenpox:** Total 26—Flin Flon 6, Winnipeg 6, Minto 2, Portage City 1, St. James 1 (Late Reported: Flin Flon 10).

**Mumps:** Total 14—Winnipeg 10, Hanover 1, Kildonan East 1, Transcona 1, Unorganized 1.

**Typhoid Fever:** Total 12—Unorganized 5, The Pas 2, Rhineland 1, Rosser 1, Shell River 1, Winnipeg 1 (Late Reported: The Pas 1).

**Diphtheria Carriers:** Total 11—St. Clements 5, Winnipeg 5, Franklin 1.

**Diphtheria:** Total 10—Winnipeg 6, Stanley 2, Brooklands 1, St. Paul West 1.

**Anterior Poliomyelitis:** Total 9—Winnipeg 4, Fort Garry 1, Franklin 1, Rivers Town 1 (Late Reported: Selkirk 1, Winnipeg 1).

**Lobar Pneumonia:** Total 8—(Late Reported: De Salaberry 1, Hillsburg 1, Killarney 1, Miniota 1, Rockwood 1, Rosedale 1, Unorganized 1, Woodworth 1).

**Erysipelas:** Total 4—Winnipeg 3, Unorganized 1.

**Influenza:** Total 1—(Late Reported: Unorganized 1).

**Septic Sore Throat:** Total 1—St. Boniface 1.

**Venereal Disease:** Total 126—Gonorrhoea 84, Syphilis 42 (month of August).

#### DEATHS FROM ALL CAUSES IN MANITOBA

For the Month of July, 1939.

**URBAN**—Cancer 24, Tuberculosis 7, Pneumonia (other forms) 3, Syphilis 3, Pneumonia (Lobar) 2, Septic Sore Throat 1, Tetanus 1, all others under 1 year 22, all other causes 162, Stillbirths 13. Total 238.

**RURAL**—Cancer 29, Tuberculosis 14, Pneumonia (other forms) 11, Pneumonia (Lobar) 6, Influenza 2, Diphtheria 1, Erysipelas 1, Whooping Cough 1, all others under 1 year 34, all other causes 147, Stillbirths 8. Total 254.

**INDIAN**—Tuberculosis 11, Pneumonia (other forms) 4, Influenza 2, Whooping Cough 2, all others under 1 year 4, all other causes 7, Stillbirths 0. Total 30.

Bismarck, N.D.: North Dakota's socialized medicine experiment, administered by the Farm Security Administration, ended July first, termed a failure. Walter Maddock, state FSA director and president of the Farmers' Mutual Aid Corporation, said the plan broke down because doctors were dissatisfied with the low pay.

—Saturday Post, September 30th, 1939.